



## Bridge Group Overview

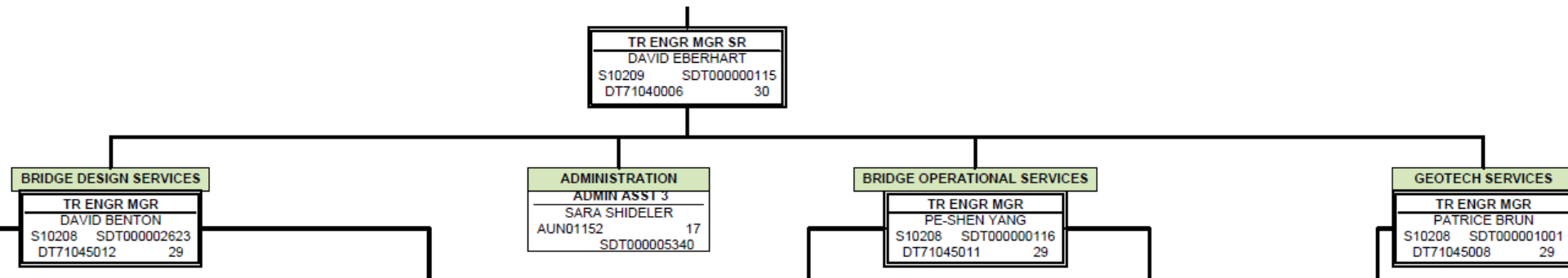
David Benton P.E.

Assistant State Bridge Engineer-Design Service

# Bridge Group Functions

- ▶ Bridge Design Service
- ▶ Bridge Preservation Service
- ▶ Geotechnical Service

# Bridge Group Administration Organization Chart



# Bridge Design Service

- Bridge Design Section A
  - Section Leader – Mr. Bill Downes
- Bridge Design Section B
  - Section Leader – Mr. Noon Viboolmate
- Bridge Design Section C
  - Section Leader – Mr. Rafe Davis
- Bridge Standards Engineer
  - Mr. Amjad Alzubi

## Design Sections' Areas of Responsibility



- Design Section A
- Design Section B
- Design Section C

# Bridge Design Service

- Scope bridge preservation projects
- In-house bridge design
- In-house transportation structure design
- Review of consultant design plans and specs
- Provide construction support
- Develop and update bridge design guidelines, standards and construction specifications



# I-10/303L TI Phase I



# Bridge Preservation Service

## Manager - Mr. Pe-Shen Yang

- Bridge Inspection Section
  - Section Leader – Mr. Peng Chen
- Bridge Management Section
  - Section Leader – Mr. Henry Sung



# Bridge Management Section

- Maintain Arizona's bridge inventory-Database Management
- Evaluate bridge repair, rehabilitation, and replacement needs for all state bridges
- Prioritize bridge preservation needs and projects
- Develop and maintain structural models for all bridges in the Arizona bridge inventory
- Perform bridge load capacity ratings
- Perform analysis and review of overweight vehicle permits
- Generate bridge evaluation reports for scoping docs

# Bridge Sub-Programs

- ITEM 762XX
  - Bridge Replacement and Rehabilitation
- ITEM 714XX
  - Bridge Inspection, Deck Replacement and Scour Retrofit

Projects are nominated through the P2P process utilizing various bridge inventory and condition data from our bridge inspections.

On average \$60 million programmed each year from ADOT preservation funding.

# Bridge Inspection Section

- Implement NBIS and NTIS in Arizona
  - National Bridge Inspection Standards
  - National Tunnel Inspection Standards
- Bridge inspection (initial, routine, in-depth, special, damage, emergency)
- Inspect State bridges
- Inspect Local bridges
- Oversight of 1 self-inspecting agency



# Geotechnical Service Manager-Mr. Patrice Brun

- Geotechnical Design Section
- Geotechnical Operations

# Geotechnical Design

Develop & implement design guidelines & specifications

Design and support the construction and maintenance of highway facilities—buildings, bridges, culverts, spillways, roadways, rock cuts, fill slopes, earth retaining structures

Monitor and mitigate unstable slopes and embankments, rock fall sites

Troubleshooting transportation facilities

cracks, breaks, displaced, weeping pavements, abandoned mines, sink holes, groundwater, earth fissures, faults, landslides and active subsidence zones





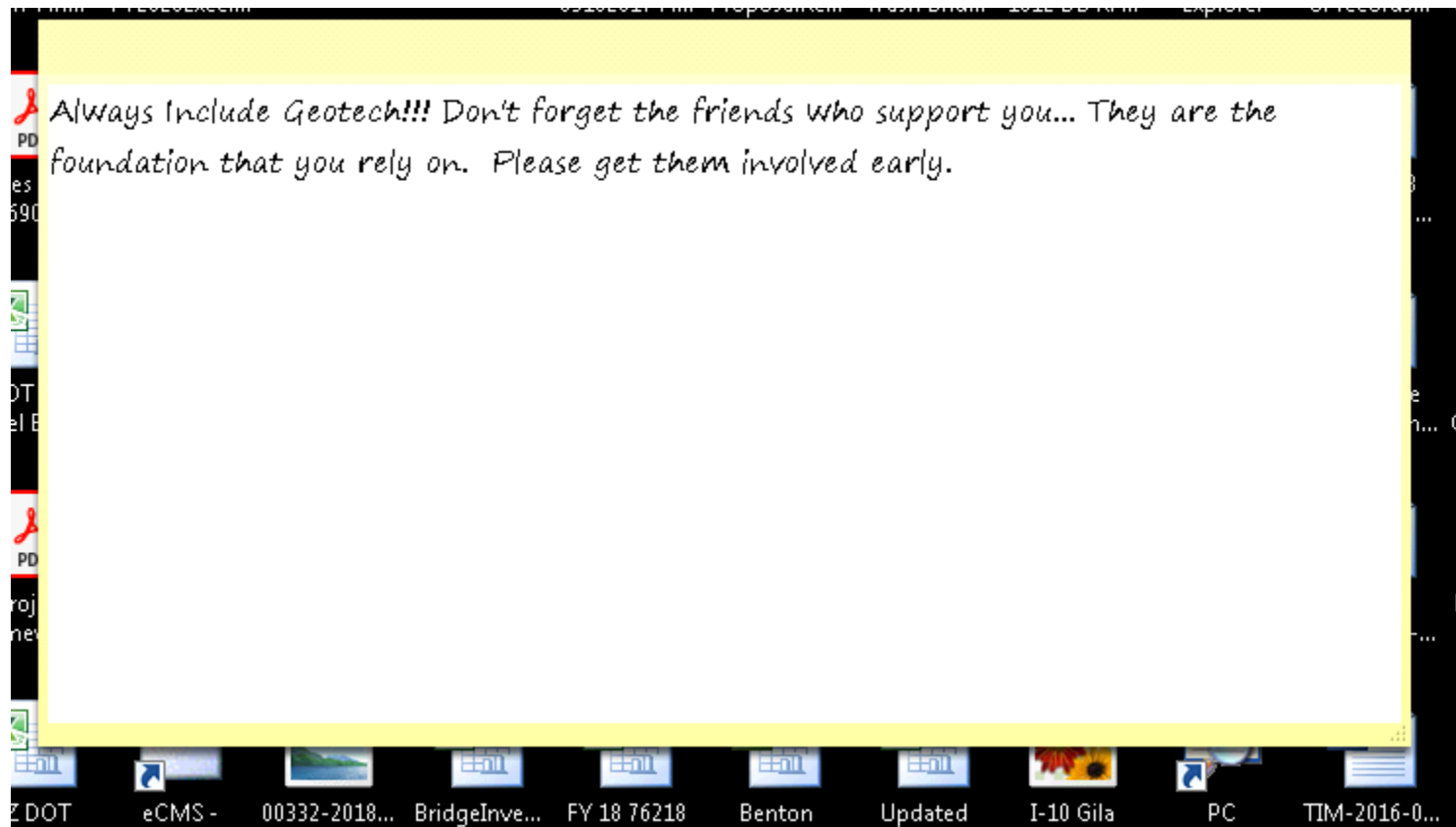


# Geotechnical Operations

- ▶ Geotechnical Field Operations
  - Conduct geotechnical field investigations
  - Monitor instrumented cut and fill slopes

# US 89 Landslide







# Any Questions?

